The International Radiation Protection Association (IRPA)

The international voice of the RP profession

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Role of IRPA
The international voice of RP professionals

52 Associate Societies
Representing 67 countries
- Over 18,000 individual members

**IRPA provides a medium for communication and advancement of radiation protection throughout the world.**

We encompass the full spectrum of national experiences, from large developed countries through to practitioners working in small developing nations.
IRPA Strategic Priorities

- To promote our role as the international voice of the RP profession through engagement with other international organisations and professional bodies on the development of the system of protection, giving emphasis to impacts on practical implementation.

- To support the needs of the Associate Societies by developing, enhancing and sharing good practice and high standards of professionalism.

- To support the education and training of RP professionals,

- To support the Radiation safety culture development

- To enhance IRPA Governance and the interface with the Associate Societies.
IRPA’s Programme

Work Programmes

• System of Protection review
  – ALARA, Reasonableness & Conservatism
• Horizon scanning
• Medical focus group
• SADC
  ▪ Future of the profession
  ▪ Recognition of competence
• IRPA governance and regional engagement
• Web site development

Working Groups

• Public Understanding TG
• Eye Dose TG
• Source Security TG
• Young Professionals Network
• Radiation protection culture
  – Healthcare
  – Higher education, Research & Teaching
Selected IRPA Priorities

1. The development of the System of Protection and feedback experience
2. Public understanding
3. Radiation protection culture
4. The future of our profession – finding and supporting the next generation
5. Recognition of competence
6. Eye lens dose
7. Radioactive source security
8. Education and training
IRPA Consultation – key issues

How could the system for protection be improved to meet the challenges and ensure the system is fit for purpose?

- Complexity and ‘understandability’
- Presentation of risk uncertainty at low dose
- Context of natural background exposure
- Dose limits – particularly the public dose limit
- ALARA and ‘Reasonableness’
Practitioner’s views on the System of Protection

- and how it can be communicated

- General perceptions: complexity & understandability
- Presentation of uncertainty in risk estimates at low dose
- Context of natural background exposure
- Dose limitation and dose limits
- ALARA and Reasonableness
- Communication and public understanding

Report published in Journal of Radiological Protection (open access)

- see IRPA website
IRPA Issues

Key issue:

How to take decisions at ‘a few mSv/a and lower’

- when we don’t really know the risk, other than ‘if there is a risk, it’s very small’
- and everything is incremental: there is no dose less than 2mSv/a

- Practical RP in particular
  - Over-conservatism
  - Reasonableness in optimisation
  - Effective use of Graded Approach
IRPA Consultation with the AS

Top tier issues arising (3)

- Optimisation principle is the cornerstone of the RP system.
- However, it is recognized that the “reasonable” level of protection according to the ALARA principle is not easy to demonstrate.

**ALARA and Reasonableness**
- Accepted as the controlling factor for exposures, but how do we decide what is ‘reasonable’?
- When have we done enough? Is it right to expect ever lower and lower doses??

- 2 workshops in Paris in February 2017 and October 2018.
The first workshop
Paris -23-24 February 2017


- The objectives were to review the foundation of the optimisation principle (ICRP system, ethical dimensions, ALARA culture) and examine the practical implementation of this principle in 3 sectors: nuclear, medicine, existing exposure situations (radon, radium, post-accident).

- The main conclusions of the first workshop were that in all sectors, optimisation remains a challenge and that optimisation is a deliberative process to achieve a reasonable “compromise” with all (informed) stakeholders.

- It’s a process: judgements are situation-dependent.
The objective was to show how the search for reasonableness can be practically done through continuous dialogue.

The workshop focused on case-studies:
- Related to public, occupational and medical exposure (e.g. discharges, waste, legacies);
- In the 3 sectors (nuclear, medical, existing exposure situations);
- Showing the involvement and role of stakeholders including capacity building.

Next steps: participation to the new ICRP TG on reasonableness / participation to a specific session during the next annual HPS meeting in Orlando in July / organisation of a specific general session during IRPA15 with all international organisations
Helping members of the public understand radiation and risk is becoming central to our activities as RP professionals.

IRPA and its Associate Societies are independent - of governments, industries, regulators - and have a high potential to be trusted as a source of information.

Societies and individual RP professionals have a duty to promote a better understanding of radiation and risk in our communities – so that we help society safely receive the benefits of using radiation.
The Communication Challenge

Giving people facts on radiation will not solve the problem – there needs to be real dialogue, listening, discussion and engagement. Perceptions are all-important.

But as professionals we still need to agree good practice on what basic concepts should be put into the picture, and how they can best be introduced.

What are the key scientific and social messages we believe are important for this dialogue?

There are ideas developing, which we must bring to fruition as soon as possible.
Communication - How can IRPA help?

What have we done so far?

**Phase 1:**

IRPA TG on Public Understanding of Radiation Risk

- to encourage and support Associate Societies in the development of effective means of enhancing public understanding of radiation risk through the sharing of good practice, ideas and resource material

Given that there is considerable literature on this topic readily available, IRPA is not intending to develop significant new material, and we intend to provide user friendly information essentially through links to existing documentation.
Public Understanding of RP and Risk (2)

What do Associate Societies do at the moment? Where are the good ideas?

We should share good practice.

Examples:
- Position Papers
- ‘Talking Heads’
- Press releases
- Schools Events
- and media liaison
- Talks service
- Web site information
- Public query service

See the IRPA web site
Public understanding is important – what more can IRPA and the Associate Societies do?

Phase 2

- How to make our societies and individual RP practitioners more comfortable, confident and effective in their interactions with ‘the public’
- Identify key messages and approaches, and how best to implement them
- Take key concepts and messages from the developing experience on risk communication – eg EAGLE, RICOMET - and make this available to practitioners in accessible form
Public Understanding: Things that are important

- Honesty – especially in acknowledging uncertainties
- Use natural background as a helpful context (in fact begin conversations with this – it’s the dominant exposure!)
- Great care over context of dose limits
- Importance of **benefits** as well as risk: “people don’t consider risk per se – they consider trade-offs”, and this is central to RP
- Use real’ language – not ‘justification’, ‘optimisation’ etc
- Does the use of a ‘banded’ approach help communication? Brings together all exposure situations.
RP culture: Enhancing radiation safety culture in the medical sector

IRPA launched a second initiative on RP culture in 2015 in collaboration with WHO and IOMP focused on Radiation Safety Culture in Health Care - RSCHC.

- The intent of IRPA’s proposal is for the medical sector to utilise the key nuclear-safety principles that were developed after the Chernobyl accident.
- It also involves the collective development of a method for identifying the needs of medical professions by taking account of regional contexts with a view to creating a safe health-care environment to which all professionals and patients naturally aspire.
Enhancing the interface with key international organisations in the medical sector

- **Purpose:** to develop a document proposing a conceptual framework for the establishment and maintenance of a radiation safety culture in health care (RSCHC).

- A series of joint regional workshops held in different regions of the world, to collect stakeholders’ feedback
  - **1st RSCHC for Latin American countries** was held in Buenos Aires in April 2015,
  - **2nd RSCHC for European countries** was held in Geneva at WHO headquarters in Dec. 2015
  - **3rd RSCHC for African countries in South Africa** in November 2016, (IAEA sponsor)
  - **4th RSCHC for Middle East and Arabic countries** in Qatar, Fevrier 2017
  - **5th for Asian and Pacific countries** Kuala Lumpur, Malaysia, in November 2017 (IAEA sponsor)
  - 6th Regional Workshop on Radiation Safety Culture in Health Care (RSCHC) for North American countries, USA Feb 2019 supported by HPS

B. Le Guen - San Diego, California 2019
The 5 workshops had commonalities and specificities:

- Plenary and breakout sessions to discuss the process of establishing and maintaining radiation safety culture in RSCHC, with some focus:
  1. The 1\textsuperscript{st} WS focus was stakeholders’ engagement;
  2. The 2\textsuperscript{nd} WS identified key elements in each area.
  3. The 3\textsuperscript{rd} WS focused on pediatric imaging.
  4. The 4\textsuperscript{th} WS focus was the challenges from advanced technologies.
  5. The 5\textsuperscript{th} WS focus was the integration of RSCHC into the broader concept of patient safety.
  6. The 6\textsuperscript{th} WS will be focused on dialogue about guidance and tools.
Where are we now?

• Draft joint document V1 based on the outcome of the WS

• Joint Sessions on RSCHC at relevant events:
  – AOCR05 (May 2018, Melbourne, Australia), WC2018 (June 2018, Prague, Czech Republic), AFRIRPA05 (September 2018, Tunis), HPS mid year meeting (Feb 2019).

• Drafting & review advanced during 2018, plans to finalize the document by 2019.
Many countries/societies report a concern over ‘where are the next generation, and how do we transfer our knowledge?’

The IRPA programme:

• Share good ideas on informing and enthusing students on RP as a career

• Young Generation Network, linking national association groups and sharing good ideas

• Every IRPA congress has a Young Persons programme:
  – including YP Prize for best presentation
  – engagement in the full scientific programme (eg session co-chairs)
  – networking opportunities (including opportunities to meet the ‘big names’)

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Recognition of Competence

There is an increasing expectation of formal recognition of competency to practice – especially for the Radiation Protection Expert (or Qualified Expert).

Recognition schemes may be a legal requirement or voluntary: in either case the national RP Society should play a lead role.

There is no ‘single best way’ to arrange a scheme – local practice, culture and legal requirements require differing approaches.

IRPA has published guidance on the key components and strengths and weaknesses of various options for certification.
First Phase In 2012 IRPA established a TG to identify key issues in the implementation of the revised eye dose limit. The TG reported its conclusions in 2013.

In Jan. 2015, IRPA asked the TG to review progress with the implementation of the recommendations and to collate current practitioner experience.

The TG worked towards the development of practical recommendations about when and how eye lens dose should be monitored and of guidance on use of protective tools depending on the exposure levels.

The document was approved by the IRPA Executive Council on 31 January 2017.
Implementation of the revised dose limits for the lens of the eyes

- The IRPA Task Group on the implementation of lens of the eye is conducting the 3rd survey

- The purpose is:
  - to promote a wide exchange of experiences, at an international level and among all the IRPA ASs,
  - and to determine the different approaches that are emerging in the RP community, seven years after the ICRP proposal to reduce the dose limit for the lens of the eye

- The questionnaire developed by TG consists of 27 questions on the implementation of the revised eye lens dose limits.

- A final report based on your answers will be prepared by the Task Group.
IRPA has established a Task Group on Radioactive Source Security

Objective:

To encourage the awareness and development of a strong responsibility and knowledge amongst RP practitioners regarding the security of radioactive sources and interlinking this aspect into safety, including the promotion of an enhanced security culture.
Education and Training

• IRPA engagement with organisations and programmes relating to training in RP:
  – eg EUTERP, ENETRAP

• Cooperation between societies on education and training opportunities

• IRPA Congresses (see next)
International and Regional Congresses

• The IRPA Congresses are a major and well-recognised part of our role:
  – They provide training opportunities for professionals
  – Facilitate the exchange of ideas between societies and individuals
  – Provide a platform for the principal international organisations (such as ICRP, IAEA, EC and UNSCEAR) to interact with the wider RP community

International Congress:

IRPA15 Seoul (South Korea) May 2020

IRPA15 abstract submission will be opened on June 1, 2019. Submission can be done through the congress website (www.irpa2020.org).
Conclusions

IRPA has an extensive programme of activities to support good practice, enhancing professional competence and networking, and encouraging the application of the highest standards of professional conduct, skills and knowledge in the profession.

As the international voice of the RP profession, IRPA stands willing to support the work of the international organisations in the development of the system of protection and its application in practice.